ABSTRACT

In a method of lossless processing of an integer value signal in a prediction filter which includes a quantiser, a numerator of the prediction filter is implemented prior to the quantiser and a denominator of the prediction filter is implemented recursively around the quantiser to reduce the peak data rate of an output signal. In the lossless processor, at each sample instant, an input to the quantiser is jointly responsive to a first sample value of a signal input to the prediction filter, a second sample value of a signal input to the prediction filter at a previous sample instant, and an output value of the quantiser at a previous sample incident. In a preferred embodiment, the prediction filter includes noise shaping for affecting the output of the quantiser.